



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO |  |
|---|-------------|----------------------|-------------------------|-----------------|--|
| 10/076,839  | 02/15/2002  | Tetsuo Maoka         | 382.1036                | 1537            |  |
| 7590 07/19/2005   |             |                      | EXAMINER                |                 |  |
| DAVIDSON, DAVIDSON & KAPPEL, LLC 14th Floor 485 Seventh Avenue New York, NY 10018 |             |                      | FOLEY, SHANON A         |                 |  |
|   |             |                      | ART UNIT                | PAPER NUMBER    |  |
|   |             |                      | 1648                    |                 |  |
|   |             |                      | DATE MAILED: 07/19/2003 | 5               |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  |   | Application No.  | Applicant(s)  | <del></del> |  |  |  |
|--|---|--|---|-------------|--|--|--|
| Office Action Summary  |   | 10/076,839   | MAOKA ET AL.  |             |  |  |  |
|  |   | Examiner   | Art Unit  |             |  |  |  |
|  |   | Shanon Foley   | 1648  |             |  |  |  |
| Period for   | The MAILING DATE of this communication Reply  | appears on the cover sheet   | with the correspondence address   | •           |  |  |  |
| THE MA  - Extension after SD  - If the pe  - If NO pe  - Failure to Any repi   | RTENED STATUTORY PERIOD FOR REALING DATE OF THIS COMMUNICATIOns of time may be available under the provisions of 37 CFR (6) MONTHS from the mailing date of this communication riod for reply specified above is less than thirty (30) days, a priod for reply is specified above, the maximum statutory per to reply within the set or extended period for reply will, by stately received by the Office later than three months after the magnatent term adjustment. See 37 CFR 1.704(b). | N. R 1.136(a). In no event, however, may reply within the statutory minimum of riod will apply and will expire SIX (6) Matute, cause the application to become | a reply be timely filed  hirty (30) days will be considered timely.  ONTHS from the mailing date of this communicat  ABANDONED (35 U.S.C. § 133). | tion.       |  |  |  |
| Status   |   |  |   |             |  |  |  |
| 1)⊠ R  | esponsive to communication(s) filed on 23   | 3 June 2005.   |   |             |  |  |  |
| ·  |   | This action is non-final.  |   |             |  |  |  |
| 3)□ S  | ,—  |  |   |             |  |  |  |
| Disposition  | n of Claims   |  |   |             |  |  |  |
| 4) ☐ Claim(s) 1,2 and 8-12 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) is/are rejected.  7) ☐ Claim(s) is/are objected to.  8) ☐ Claim(s) 1,2 and 8-12 are subject to restriction and/or election requirement. |   |  |   |             |  |  |  |
| Application  | n Papers  |  |   |             |  |  |  |
| 9)□ Th   | ne specification is objected to by the Exam   | niner.   |   | •           |  |  |  |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.  |   |  |   |             |  |  |  |
|  | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |  |   |             |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |   |  |   |             |  |  |  |
| Priority un  | der 35 U.S.C. § 119   |  |   |             |  |  |  |
| a)□<br>1.<br>2.<br>3.  | cknowledgment is made of a claim for fore  All b) Some * c) None of:  Certified copies of the priority docum  Certified copies of the priority docum  Copies of the certified copies of the papplication from the International Bure the attached detailed Office action for a  | ents have been received. ents have been received in priority documents have been reau (PCT Rule 17.2(a)).  | Application No en received in this National Stage   |             |  |  |  |
| Attachment(s   |   | _  |   |             |  |  |  |
|  | of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PTO-948)   |  | v Summary (PTO-413)<br>o(s)/Mail Date   |             |  |  |  |
| 3) Informa   | tion Disclosure Statement(s) (PTO-1449 or PTO/SB/<br>o(s)/Mail Date   |  | f Informal Patent Application (PTO-152)   |             |  |  |  |

Application/Control Number: 10/076,839

Art Unit: 1648

## **DETAILED ACTION**

The Group and/or Art Unit of your application has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 1648, Examiner Foley.

Applicant's election without traverse of Group I in the response filed June 23, 2005 is acknowledged. However, upon consideration of the amended and newly presented claims, a new restriction of the claims is required.

## Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1 and 2, drawn to a nucleotide sequence encoding SEQ ID NO: 1 or the complement thereof, classified in class 536, subclass 23.1.
- II. Claim 8, drawn to a nucleotide sequence encoding NIa-Pro (SEQ ID NOs: 3 and4), classified in class 536, subclass 23.72.
- III. Claims 9 and 10, drawn to a nucleotide sequence encoding the P1 protein(nucleotides 136-1575 of SEQ ID NO: 1), classified in class 536, subclass 23.72.
- IV. Claims 11 and 12, drawn to a nucleotide sequence of the capsid coding region (nucleotides 9064-9945 of SEQ ID NO: 1), classified in class 536, subclass 23.72.
- V. Claims 11 and 12, drawn to a nucleotide sequence of the HC-Pro coding region
   (nucleotides 1576-2946 of SEQ ID NO: 1), classified in class 536, subclass 23.72.
- VI. Claims 11 and 12, drawn to a nucleotide sequence of NIb (nucleotides 7501-9063 of SEQ ID NO: 1), classified in class 536, subclass 23.72.

The inventions are distinct, each from the other because of the following reasons:

Application/Control Number: 10/076,839

Art Unit: 1648

Inventions I-VI are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). Group I is drawn to a nucleotide sequence encoding SEQ ID NO: 1, which corresponds to the full-length genomic nucleotide sequence of the Papaya Leaf-Distortion Mosaic Virus. This sequence is patentably distinct from groups II-VI because it can generate virus particles. Groups II-VI are drawn to different portions of group I. None of the products of groups II-VI can generate virus particles. Each of these groups are patentably distinct from each other and group I because each sequence has a unique sequence structure. Due to the structural uniqueness of each sequence, each encodes a different protein. Therefore, each of the nucleotide sequences of Groups I-VI has a different function because they encode different products, i.e. the PLDMV virus genome, NIa-Pro, P1, capsid, HC-Pro and NIb, respectively.

These inventions are distinct for the reasons given above. Due to the structural and functional divergence of each nucleotide claimed in each group, the search required for Groups I-VI is separate and non-overlapping as evidenced by their separately designated SEQ ID NO even though they are classified in the same class/subclass. Moreover, a search for all of the groups would be burdensome to the Office since each SEQ ID NO. must be searched independently of all others in the patent and non-patent literature databases world-wide, which uses the time and resources of the Office as there are only two sequence processors for the entire technology center. This sequence search does not preclude a worldwide patent search as well as cross-referencing indexes and a non-patent literature search for relevant terms. Therefore, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shanon Foley whose telephone number is (571) 272-0898. The examiner can normally be reached on M-F 6:00 AM - 2:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Housel can be reached on (571) 272-0902. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shanon Foley
Primary Examiner
Art Unit 1648